Enterprise Resource Planning

Option for California?

Overview

- 1990's – Corporate America reverses PC revolution
  - Hidden support costs/inefficiencies
  - Increased security threats
  - Data uniformity & integrity problems
  - Poor accountability
- PREMISE: California should pursue enterprise solutions to be <u>effective</u>, <u>save money</u>, and <u>improve accountability</u> in IT
- State IT Strategic Plan consistent with this
- My focus: Enterprise Resource Planning (ERP)

Governments Adopting ERP

- States of Pennsylvania, LA, ARK
- Government of Canada
- Counties of Santa Clara, Sacramento, and San Diego
- Cities of San Diego and Richmond
- Sacramento RTD
- SMUD
- AOC, CALPERS, & DWR – among few State implementers

Major DWR Programs

- State Water Project (next slide)
- flood management/levee maintenance
- dam safety
- local assistance grant programs
- managing 59 electric power contracts worth $43 billion & $11.3 billion revenue bonds.
- Annual operating budget of over $1 billion; 2,500 employees.

California State Water Project

- **647 miles of aqueduct**
- **Water Supply Facilities**
  - 14 dams and reservoirs
  - 21 pumping plants w/153 units
  - 10.6 BkWh power consumption*

    (#1 power consumer in California)

- **Power Generation**
  - 12 generating plants w/40 units
  - 6.6 BkWh power production*

    (#4 public power producer in California)

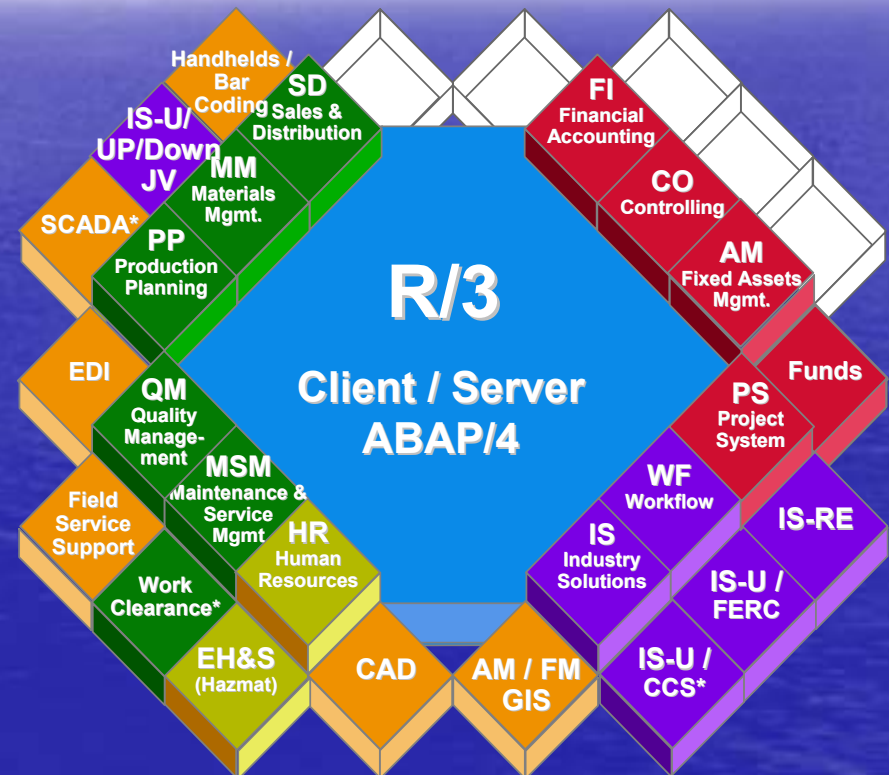* Power production/consumption in 2000

DWR Enterprise Systems

- Network (Wide-Area, Local-Area, SCADA)
- Project Management Office
- Full service Help Desk
- Exchange messaging system w/Active Directory
- Security and virus protection
- IT asset inventory
- ERP – SAP

ERP Uses and Samples

DWR SAP Modules

- HR Human Resources
- ESS Managers' Desktop
- AM Asset Management
- CO Controlling
- FI Finance
- FM Funds Management
- MM Materials Management
- PM Plant Maintenance
- PP Production Planning
- PS Project Systems
- CARA Water Project Cost Allocation

- BW Business Information Warehouse
- GM Grants Management (Grantor and Grantee)
- Work Clearance Management
- Impress Project Management Bolt-on
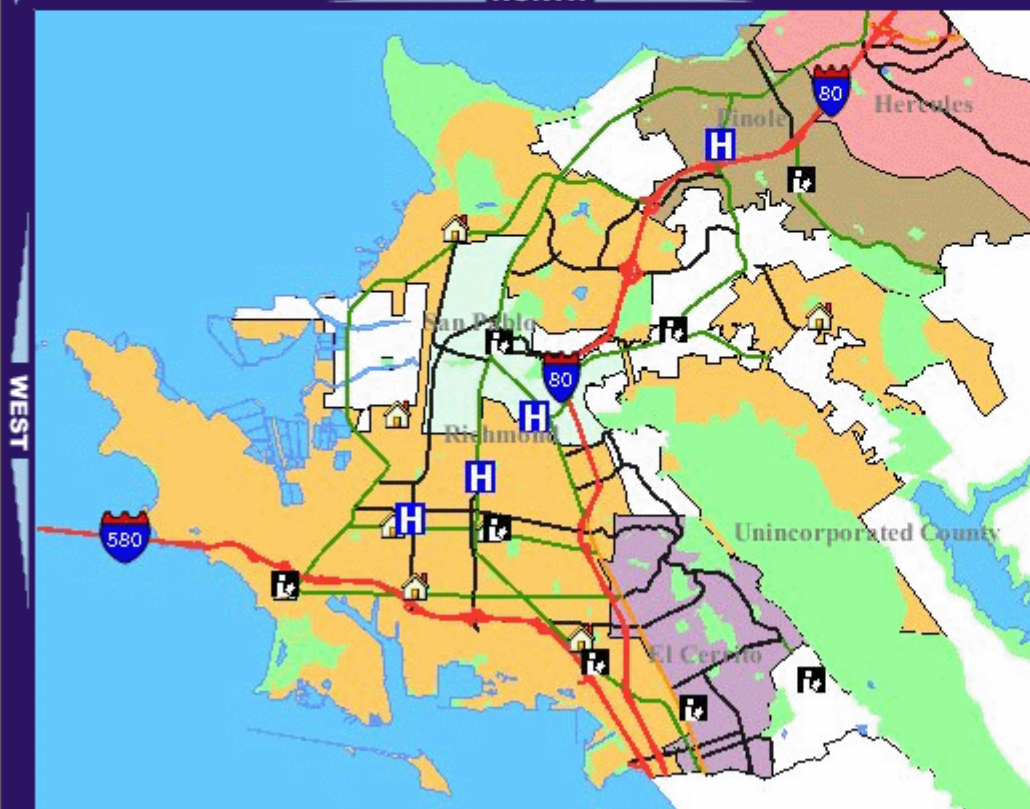
Min/Max Reorder Point Report

Min/Max Reorderpoint Planning - Report

Program   : ZPHA2_MM2AE01_MINMAX
System(Client): QAC(400)   Min/Max Reorderpoint Planning - Report
Requestor   :
Material with Requisition w/o P.O.: Highlighted in Yellow   Material with open Purchase Orde

	Plant	SLoc	Material	Material description	Matl group	Bin	Curr. St.o	Reorder pt	Tot. Res.	UO
☐	SL00	SL01	1893	BOLT,HEX,NC,GR-5,PLT,3/8" X 3/4"	CONST SUP	A-15-03-08	0	50	0.000	EA
☐	SL00	SL01	1909	BOLT,HEX,NC,GR-5,PLT,5/16" X 2"	CONST SUP	A-15-02-07	99	100	0.000	EA
☐	SL00	SL01	1910	BOLT,HEX,NC,GR-5,PLT,5/16" X 2-1/2"	CONST SUP	A-15-02-09	54	100	50.000	EA
☐	SL00	SL01	1925	BOLT,HEX,NC,GR-5,PLT,5/8" X 1"	CONST SUP	A-27-07-01	90	100	0.000	EA
☐	SL00	SL01	1929	BOLT,HEX,NC,GR-5,PLT,5/8" X 2-1/2"	CONST SUP	A-16-04-01	7	50	0.000	EA
☐	SL00	SL01	1948	BOLT,HEX,NC,GR-5,PLT,7/16" X 3"	CONST SUP	A-15-04-02	0	25	50.000	EA
☐	SL00	SL01	2016	BOLT,HEX,NC,GR-5,PLT,1/4" X 1/2"	CONST SUP	A-15-01-01	50	50	0.000	EA
☐	SL00	SL01	2021	BOLT,HEX,NC,GR-5,PLT,1/4" X 2-1/2"	CONST SUP	A-15-06-04	277	400	100.000	EA
☐	SL00	SL01	2025	BOLT,HEX,NC,GR-5,PLT,1/4" X 3/4"	CONST SUP	A-15-04-01	0	50	100.000	EA
☐	SL00	SL01	2034	BOLT,HEX,NC,GR-5,PLT,1/4" X 6"	CONST SUP	A-15-07-04	392	400	0.000	EA
☐	SL00	SL01	2038	BOLT,HEX,NC,GR-5,PLT,3/4" X 1"	CONST SUP	A-15-05-04	0	50	0.000	EA
☐	SL00	SL01	2675	BOX,ALUM,WTRPROF,1 GANG,(3) 1/2" HOLES	ELECTRIC	A-14-04-05	0	12	36.000	EA
☐	SL00	SL01	2676	BOX,ALUM,WTRPROF,1 GANG,(3) 3/4" HOLES	ELECTRIC	A-13-08-02	0	12	16.000	EA
☐	SL00	SL01	2710	BOX,OUTLET,4" X 2-1/8"	ELECTRIC	A-11-08-03	0	12	0.000	EA
☐	SL00	SL01	2927	BROOM,CURB,#8-08-03107,6R101	JANITOR	B-	1	1	0.000	EA
☐	SL00	SL01	2954	BRUSH,CARBON,GE ROTATING EXCITER,DWR 2R	ELECTRIC	A-66-04	0	50	104.000	EA
☐	SL00	SL01	2957	BRUSH,CARBON,HELWIG #DWR 1	ELECTRIC	A-66-04	0	50	60.000	EA

SAPMSSY0   darkmoon   INS

Overview Objects on Loan (Infotype 0040)

PersNo   511   CHRISTOPHER C NAVARRETE

    Managerial   WWG E

    Managerial BU01   Perm Full Time   DWR Position   0510-1393692

Choose   01/01/1800 to   12/31/9999   STy.

Start date	End date	Obj...	STy.name	No.	Loan object number
05/01/2001	12/31/9999	05	American Express Corpo	0	
05/01/2001	12/31/9999	07	DGS Credit Card	0	81000 820
12/17/2004	12/31/9999	09	Cellular Phone	1	HAGAD4372A0YZ
05/01/2001	12/31/9999	09	Cellular Phone	0	
05/01/2001	12/31/9999	11	Computer	0	
05/01/2001	12/31/9999	15	Employee ID Card-emerg	0	
05/01/2001	12/31/9999	17	Key Card	1	07675643 FP23099L
05/01/2201	12/31/9999	18	Key(s)	0	
05/01/2001	12/31/9999	20	Lap Top	0	
04/01/2001	08/01/2002	21	Pager	1	0422261
05/01/2001	12/31/9999	34	Palm Pilot	0	*IPAQ HANDHELD
10/27/2003	12/31/9999	35	Other	1	916-425-3248

Pers.no.	Last name	First name	STy.	Description	Loan object number
00000511	NAVARRETE	CHRISTOPHER	20	Lap Top	
00000526	HESTER	DANIEL	20	Lap Top	110934
00000557	HIGGS	GERALDINE	20	Lap Top	
00000820	KWONG	JAMES	20	Lap Top	
00001391	FARMER	FRANK	20	Lap Top	
00001458	HOM	MICHAEL	20	Lap Top	
00001556	SANCHEZ	JOHN	20	Lap Top	0025391705
00001586	DAHLBERG	MONICA	20	Lap Top	
00001601	IMPENS	CHRISTOPHER	20	Lap Top	DWR #06341
00001976	TOPPER	JUDITH	20	Lap Top	
00002266	CHAN	PETER	20	Lap Top	06321 81000
00002303	LUONG	DANNY	20	Lap Top	SN 7BL4F21
00002322	MURILLO	RAMON	20	Lap Top	06323
00002398	HUEY	DIANE	20	Lap Top	0017205602
00002419	NG	MURRAY	20	Lap Top	
00002790	BRAUER	CYNTHIA	20	Lap Top	0025386523
00002831	TU	DAT	20	Lap Top	
00003593	HUANG	MENG	20	Lap Top	
00003985	JARUMAY	ROBERT	20	Lap Top	
00004067	WOLF	KENNETH	20	Lap Top	0023644909
00004621	COLE	KAREN	20	Lap Top	
00005135	SHIGAKI	WARD	20	Lap Top	0025391706
00005293	AGUIAR	JOSEPH	20	Lap Top	

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Address http://sapessprd.water.ca.gov/scripts/wgate/ZPZTRN/!?STATUS=http%3a%2f%2fsapessprd%2ewater%2eca%2egov%2fscripts%2fwgate%2fpzm   Go   Links

ESS Employee Self-Service

Training History

Name: **BEN WILLIAMS**

Personnel number: **4667**

Attendee	**BEN WILLIAMS**					
Personnel Number	00004667					
Organizational Unit	0500					
Selection Period	01/01/1900 – 03/23/2005					

Business Event	Course Code	Beg Date	Days	Hours	Cat	Sub
EXECUTIVE LEADERSHIP FORUM		01/16/2001	1	4.00		
SAP/MICROSOFT CONGRESS		01/24/2001	2	16.00		
DEFENSIVE DRIVER TRAINING		02/22/2001	1	4.00		
SAPO FM101 Budget Workshop-ISS	E50007926	02/28/2001	2	15.00		
SAPPHIRE 2001 CONFERENCE		06/12/2001	4	32.00		
IT Outlook/Exchange Computer B	E50012539	10/01/2001	1	8.00		
RESPECT/PROFESSIONALISM IN THE		03/27/2002	1	3.50		
SAPO FM104 PASO Budget & Cost	E50018674	09/25/2002	1	8.50		
CC Management Off Site	E50018593	01/08/2003	0	0.00		
LS ETHICS ORIENT. FOR ST OFFIC	50006330	02/23/2003	1	2.00	JR	
SAPPHIRE 2003 CONFERENCE		06/15/2003	5	40.00		
APPLIED PROJECT MANAGEMENT		06/23/2003	3	24.00		
HS Workplace Safety Training	E50019836	09/22/2003	1	2.00		
EP SEMS – Executive Course	E50020462	12/04/2003	1	3.00		
CC Management Off Site	E50021535	01/06/2004	2	15.00		
PRIV 5-DAY PROJECT MANAGEMENT	50008333	03/29/2004	5	40.00	JR	
LS Sexual Harassment Prev/Mgr&	E50021303	05/17/2004	1	15.00		
SAP2B BW Reports	E50022587	11/01/2004	1	4.00		
LS ETHICS ORIENT. FOR ST OFFIC	50006330	11/22/2004	1	2.00	JR	
SAP2B BW Reports	E50022598	12/08/2004	1	4.00		
SAPO FM101 Budget Workshop	E50023218	12/08/2004	1	8.00		
Skelly Officer Training	E50023385	02/25/2005	1	4.50		
Total			37	254.50		

Benefits of ERP

- More consistent cost and data information
- Employee & Manager Self Service
- On-line employee, position, and training information
- On-line, real-time reporting
- Role-based security
- Enterprise cost savings (duplication avoided)
- DWR Plant maintenance: **OA increased from 85% in 1995 to 93% in 2003**

Cost of Implementing ERP

- Staff – reduced as 6 major legacy business systems and dozens of minor systems are replaced
- Consulting – Essential, especially during start-up; can be phased down when operational
- Real savings are from business process improvements

Role of the CIO

- May be threatening– not typical IT
- Emphasize best business practices
- Insist upon full documentation
- Support training and change management
- Establish strong controls on <u>process</u> and <u>methodology</u>
- Know business owners and managers (see DWR SAP Migration Project staffing)

SAP Migration Project
Timeline for Roles and Responsibilities

Role	Net Staff Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	$x1,000
				Planning & Scoping			*Business Blueprint*	*Realization*					*Final Preparation*			*Go-Live & Support*			
Core Team A	30																		2,827.5
Core Team B	8																		565.5
BPO Team	28.5																		281.5
Implementation Team	37.5																		2,100.2
Superuser Team	50																		1,450.0
Salary Savings																			(381.2)
SUB-TOTAL	154																		6,863.5
P1 - Grantee	6																		95.2
P2 - Grantor	5																		63.9
P3 - Mult Labor Rates	8																		39.9
P4 - Proj Mgmt S/W	4																		73.6
P5 - Work Clearance	11																		697.8
SUB-TOTAL	34																		970.3
PROJECT TOTALS	188																		7,833.8

Key:	chg #
Occasional meetings	4
4-8 hrs. per week	6
8-16 hrs. per week	12
Half time	80
3/4 time	120
Full time	160

Is California Ready for ERP?

- Must be willing to learn and lead change
- Need new classifications for support of ERP
- Need strong <u>leadership</u>, including <u>Legislature</u>
- Must adopt BEST PRACTICES; not "California-knows-best"
- Change management must be top priority
- Leadership must start with State IT managers